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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,735

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Michael L. Regal

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11/05/2007

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EXAMINER

YUEN, KAN

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

11/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/722,735

Applicant(s)

REGAL, MICHAEL L.

Examiner

Kan Yuen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 2, 4, 5, and 8 have been considered but are moot in view of the new ground(s) of rejection within the same reference. Applicant argued in page 10 of the remark, that each port device initially outputs link messages on the downstream link coupled to each port device, with each link message holding a link position value equal to a fixed value, and subsequently outputs link messages on the downstream link coupled to each port device, with each link message holding a link position value equal to an incremented link position value, where the incremented link position value is equal to the link position value received on the upstream link incremented by one is not found in Habeck. However, according to the reference, a controller started out by sending a message in a loop, the first switch box received the message, assigned its own lds, and incremented value to 1 in the message, and then forwarded it to the next switch device. The next switch device received the message, would increment the initial value of 1 to value of 2, and then forwarded it the next device, and so on (column 5, lines 22-45). The reference also disclosed the method of determining which switch box has failed by using headcount method (column 4, lines 8-22).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Habeck et al. (Pat No.: 5684789).

In claims 1, and 4 Habeck disclosed the method of transmitting an initial command from a supervisory device included in a ring of linked devices including the supervisory device and a plurality of port devices, with each device in the ring including an output and an input, with the input of each device in the ring coupled by an upstream link to the output of an upstream device in the ring and with the output of each device in the ring coupled by a downstream link to the input of a downstream device in the ring and with the initial command having a device number field holding an initial value (Habeck et al. see fig. 1, boxes 50, 52, 54, 56, 58, and see column 5, lines 30-50). As shown in fig. 1, the devices 50, 52, 54, 56, and 58 formed a ring network with bi-directional links. The controller sends an initial command signal to switch box 50, and the switch box set its own ID in the command signal as the initial value. In this case, the controller is the start-up device, and the switch boxes are the linked devices; receiving the initial command on the upstream link coupled to a port device and, when the command is received, incrementing a value held in the device number field and transmitting the initial command with an incremented value on the downstream link coupled to the port device (see column 5, lines 22-45). Once the command circulated the loop, the first switch box received the message, assigned its own Ids, and incremented value to 1 in the message, and then forwarded it to the next switch device;

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initially outputting link messages on the downstream link coupled to each port device, with the link messages holding a link position value equal to a fixed value (Habeck et al. see fig. 1, boxes 50, 52, 54, 56, 58, and see column 5, lines 30-50). As shown in the reference, the controller sends an initial command signal to switch box 50, and the switch box set its own ID in the command signal as the initial value; subsequently outputting link messages on the downstream link coupled to each port device with the link messages holding a link position value equal to an incremented link position value where the incremented link position value is equal to the link position value received on the upstream link incremented by one (see column 5, lines 22-45). Once the command circulated the loop, the first switch box received the message, assigned its own Ids, and incremented value to 1 in the message, and then forwarded it to the next switch device. The next switch device would increment the initial value of 1 to value of 2, and then forwarded it the next device; storing a new link position value received on the upstream link coupled to the supervisory device (see column 5, lines 55-65, and see column 6, lines 1-10). The determination of whether the message is received back by checking the stored sequence number against the sequence number in the message; and comparing the new link position value to the number of devices in the ring to determine the location of a bad link in the ring of linked devices if the initial command is not received at the supervisory device before a time period expires (see column 4, lines 8-20, and see column 5, lines 30-50). Once the command circulated the loop, each switch boxes assigned its own Ids to the command; therefor the controller knows how many boxes are connected, and which box is not functioning by sending a reverse command. The

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controller can also perform headcount or comparing of each device with the value in the message to determine which device was malfunction.

Regarding claim 2, Habeck disclosed the method of reading an external storage device to read a platform value indicating the number of devices in the ring (see column 5, lines 55-65, and column 6, lines 1-10).

Regarding claim 5, Habeck disclosed the method of means for reading a platform value from an external storage device indicating the number of devices in the ring (see column 5, lines 55-65, and column 6, lines 1-10).

Regarding claim 8, Habeck disclosed the method of a supervisory device for use in a ring of linked devices including the supervisory device and a plurality of port device, with each device in the ring including an output and an input, with the input of each device in the ring adapted to be coupled by an upstream link to the output of an upstream device in the ring and with the output of each device in the ring adapted to be coupled by a downstream link to the input of a downstream device in the ring, with the supervisory device configured to transmit an initial command having a device number field holding an initial value (Habeck et al. see fig. 1, boxes 50, 52, 54, 56, 58, and see column 5, lines 30-50). As shown in fig. 1, the devices 50, 52, 54, 56, and 58 formed a ring network with bi-directional links. The controller sends an initial command signal to switch box 50, and the switch box set its own ID in the command signal as the initial value. In this case, the controller is the start-up device, and the switch boxes are the linked devices; and with the supervisory device configured to store a new link position value received on the upstream link coupled to the supervisory device (see column 5,

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lines 55-65). The determination of whether the message is received back by checking the stored sequence number against the sequence number in the message; and configured to compare the new link position value to the number of devices in the ring to determine the location of a bad link in the ring of linked devices if the initial command is not received at the supervisory device before a time period expires (see column 4, lines 8-20, and see column 5, lines 30-50). Once the command circulated the loop, each switch boxes assigned its own Ids to the command; therefor the controller knows how many boxes are connected, and which box is not functioning by sending a reverse command. The controller can also perform headcount or comparing of each device with the value in the message to determine which device was malfunction; with each port device configured to initially output link messages on the downstream link coupled to each port device, with the link messages holding a link position value equal to a fixed value, and to subsequently output link messages on the downstream link coupled to each port device, with the link messages holding a link position value equal to an incremented link position value, where the incremented link position value is equal to the link position value received on the upstream link incremented by one (see column 5, lines 22-45). Once the command circulated the loop, the first switch box received the message, assigned its own Ids, and incremented value to 1 in the message, and then forwarded it to the next switch device. The next switch device would increment the initial value of 1 to value of 2, and then forwarded it the next device.

***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kan Yuen whose telephone number is 571-270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ky



RICKY Q. NGO  
SUPERVISORY PATENT EXAMINER